

6,119,000). The Office Action alleged that Sanmugan discloses all of the elements of the claimed invention, with the exception of generating a trace report for a mobile station. The Office Action relied upon Stephenson to allegedly cure the deficiencies of Sanmugam. Applicant respectfully submits that the prior art cited in the Office Action fails to teach, suggest or disclose the features of the claimed invention. Therefore, the rejection is respectfully traversed and reconsideration is respectfully requested for the reasons which follow.

Claim 1, upon which claims 2-11 are dependent, recites a method of trace activation in a mobile communications system. The mobile stations is in communication with a mobile communications network. The method includes a step of directing a communication from the mobile station to a predefined trace activation number of a tracing facility. The steps of activating tracing at the tracing facility for the mobile station from which the communication originates and generating a trace report for the mobile station are included in the method.

Claim 12, upon which claim 13 is dependent, recites a mobile communication system which comprises at least one mobile station, a communications network and a tracing facility. The communications network is arranged to communicate with the at least one mobile station. The tracing facility traces at least one of the mobile stations. The tracing facility also has a predefined trace activation number for activating tracing of the at least one mobile station in response to a communication from the at least one mobile station to the trace activation number.

As a result of the claimed invention, a system and a method is provided where a trace activation number of a tracing facility, to which a communication from a mobile station is directed, enables the number to be traced automatically. Thus, the invention provides a relative easy and automatic method of trace activation of a mobile station. For example, a maintenance person may control tracing of his mobile station anywhere, where the mobile station has a connection to a mobile communication network. Another advantage of the present invention is that tracing may be activated on-demand, which lessens the demand load on the network. The network does not constantly monitor and trace the mobile station. Instead, the mobile station is traced when a communication initiated from the mobile station is directed to the trace activation number of a tracing facility. These advantages are not all-inclusive but are merely exemplars of some of the benefits of the invention.

Applicant submits that the prior art fails to disclose or suggest the elements of the invention as set forth in claims 1-13, and thereby fails to provide the critical and nonobvious advantages that are provided by the invention. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The teaching or suggestion to make the claimed combination must be found in the prior art, and not be based on Applicants' disclosure. See M.P.E.P. §§ 2143.01 and 2143.03.

Sanmugam discloses a system and a method of detecting fraud in a radio communication networks by analyzing activity, identification or RF (Radio Frequency) channel data for mobile stations in a network. Sanmugan detects fraud that may occur within a communications network. In Sanmugan, the system operator selects particular types of activities to monitor in order to detect the occurrence of fraud on an individual subscriber basis or a specific geographic region. (Sanmugam, col. 25, lines 16-26 and 40-42). For tracing on a regional basis, the device in Sanmugan may also be traced by the controlling MSC (Mobile Switching Center). (Sanmugan, col. 25, lines 43-45).

Stephenson discloses a method of tracking identity-code changes in communication systems in which a plurality of user stations can simultaneously conduct respective communications transactions wherein signaling messages are exchanged with the remainder of the communication system. (Stephenson, col. 1, lines 6-8 and col. 2, lines 1-4). The device in Stephenson attempts to obtain sought-after information transmitted during the communications transaction by monitoring the signaling messages on the network. Stephenson attempts to ascertain the current operative identity code being used for a user by monitoring the network signaling messages. (Stephenson, col. 1, lines 49-62). Tracking is performed by monitoring the signaling messages over an A or Abis interface (Stephenson, col. 2, lines 11-21 and lines 50-67). The device in Stephenson generates a report that includes the identity codes. (Stephenson, col. 3, lines 16-17). Tracking in Stephenson is activated by instruction monitoring probes 40 to monitor and report an activity of interest. (Stephenson, col. 21, lines 14-23 and Figure 1).

The tracking instructions are given by a network operator, as the tracking apparatus is functionally independent of the mobile stations.

Applicant submits that the cited references fail to teach or suggest the claimed invention because Sanmugam discloses a system and a method of detecting fraud in a radio communications network. Sanmugan discloses that tracking may be performed either on an individual subscriber or on a specific geographic region basis. In Sanmugan as specifically discussed in col. 25, lines 16-26 and 40-42, the system operator must actively initiate the tracing of the mobile station when the tracing is performed on an individual basis. Either the system operator or a MSC may initiate the tracing when tracing is performed on a regional basis in Sanmugan. However, activation of tracing in a particular region activates the tracing for all active subscribers in the selected region.

Thus, in comparison to the claimed invention, Sanmugan fails to disclose or teach a step of directing a communication from a mobile station to a predefined trace activation number of a tracing facility. In the present invention, a system and a method is provided where tracing of a certain mobile station is activated upon a communication directed from a mobile station to a predefined trace activation number of a tracing facility. Tracing of a mobile station may include at least recording actions of the mobile station and/or actions in the mobile network relating to the mobile station. Since tracing on an individual subscriber basis in Sanmugan is activated by a operator commands in the home system (Sanmugan, col. 25, lines 40-42), Sanmugan fails to teach or suggest the claimed invention.

Another element missing from Sanmugan, as admitted by the Office Action, is the step of generating a trace report for the mobile stations. The Office Action relies upon Stephenson to allegedly cure the deficiencies of Sanmugan. However, Stephenson fails to cure the deficiencies of Sanmugan. Although the device in Stephenson monitors signaling messages transmitted between users of a communication systems and generates a report of identity codes detected within the signaling messages, Stephenson also fails to teach, disclose or suggest the step of directing a communication from the mobile station to a predefined trace activation number of a tracing facility. Stephenson monitors and records changes to identity codes transmitted between a plurality of users during their communications over a network. Stephenson does not activate tracing when a communication is directed to a predefined trace activation number. Stephenson suffers from the same shortcoming as Sanmugan. Namely, a system operator gives the instructions to initiate the tracing of the mobile station. Stephenson states that the network operator monitors the mobile stations in order to identify individual handsets or batches of handsets which are not performing as expected or to detect fraudulent usage of multiple handsets claiming to have the same equipment identity. (Stephenson, col. 21, lines 44-51).

Since neither Sanmugan nor Stephenson discloses or teach the step of directing a communication from the mobile station to a predefined trace activation number of a tracing facility, Applicant respectfully submits that neither Sanmugan nor Stephenson, taken in combination or alone, renders claims 1 and 12 of the claimed invention obvious.

In addition, claims 2-11 depend from claim 1 and claim 13 depends from claim 12 and are therefore allowable at least for the reasons claims 1 and 12 are allowable, respectively, and for the specific limitations recited therein.

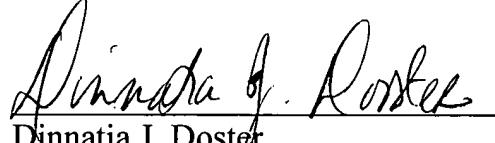
CONCLUSION

As discussed above, Applicant submits that certain clear and important distinctions exist between the cited prior art and the claimed invention. Applicant submits that these distinctions are more than sufficient to render the claims of the invention unanticipated by and unobvious in view of the prior art. It is therefore requested that claims 1-13 be found allowable, and this application passed to issue.

Having addressed each of the foregoing rejections or objections, it is respectfully submitted that this application is now in condition for allowance. Notice to that effect is respectfully requested. Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate Extension of Time. In the event there are any fees due with respect to the filing of this paper, please charge Counsel's Deposit Account 50-2222.

Respectfully submitted,



Dinnatia J. Doster
Registration No. 45,268

Customer No. 32294

SQUIRE, SANDERS & DEMPSEY LLP
8000 Towers Crescent Drive, 14th Floor
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

DJD:lls

Enclosure: Revocation and New Power of Attorney